California MEDICINE

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EDITORIAL

Allergy Skin Testing

THE SKIN TEST has been a most important functionary in the evolution of the subject of allergy. Since the development of the scratch and intracutaneous tests as diagnostic procedures in hereditary forms of hypersensitivity, allergists have come to appreciate their importance and their limitations. The skin test is, at best, a relatively crude diagnostic technique which, although simple to carry out, is subject to many pitfalls. Considerable experience is necessary for the appraisal of reactions obtained with it.

The scratch and the intracutaneous techniques are the methods most generally employed in testing for allergy of the hereditary type. The scratch test is performed by gently rubbing allergenic material into a superficial skin scratch. The intracutaneous test is done by introducing a previously calculated amount of allergen into the superficial layers of the skin. Both procedures have their limitations and advantages. The scratch technique is fairly simple and inexpensive and diminishes the likelihood of constitutional reactions that are liable to occur with careless and inexperienced use of the intracutaneous method. On the other hand the intracutaneous test is more sensitive than the scratch test and is, accordingly, a more effective diagnostic procedure. A decided advantage of the intracutaneous method is its adaptability and flexibility. The testing allergens may be varied in concentration to suit the need of each patient. The same materials used for testing may be employed also for desensitization treatment.

Many modifications of the scratch and the intracutaneous tests are being used. Some allergists recommend and employ the puncture test which is conducted by needle puncture through a drop of allergen. Others, as a variation of the scratch technique rotate the end of a fine narrow borer or screw driver on the skin and then rub allergen into the slightly abraded area. Another method is to mix the allergen with a vehicle that readily penetrates the skin and then gently rub it in. Still another and more novel technique is the introduction of an allergen into the skin by electrophoresis. However, in all these procedures the same immunologic principles apply, and the various techniques have been derived simply to satisfy the particular needs and preferences of the investigator. Most clinicians concentrate on one technique, and perfect it to a point where it provides for them more information than would be obtained with the less skillful application of several methods.

Many factors, nonspecific and immunologic, contribute stumbling blocks to a neophyte in the interpretation of the clinical significance of cutaneous reactions: the skin reactivity of each person differs from that of others; the skin reactivity differs from place to place on the skin of each person; the skin reactivity fluctuates with age and may be suppressed in certain diseases; the skin reactivity is influenced by the concentration and amount of allergen employed; the cutaneous reaction may result from different immunologic mechanisms in the same person and vary in clinical significance; and the cutaneous reactions in different persons may be produced by the same immunologic mechanism but be of unequal importance.

In the hereditary group of allergic diseases the cutaneous reactions obtained by testing with allergens are almost always mediated by the skin-sensitizing antibody which is present in both blood and tissues. An outstanding feature of the skin-sensitizing antibody is its affinity for the skin and the mucous membranes. Passive sensitization of respiratory, gastrointestinal, and ophthalmic mucous membranes may be as easily accomplished as the passive sensitization of skin. There is, therefore, sound reason for cutaneous testing in allergic dis-

eases of the hereditary type, even though the symptoms are derived from the mucous membranes and not the skin.

Cutaneous tests yield the most satisfactory results in allergic disorders of the respiratory tract in which inhalant allergens (pollens, dusts, danders, molds) play the most important role. In patients with allergic intrinsic dermatitis, migraine, and gastrointestinal allergic disease—conditions in which foods are likely to play some etiologic role—the skin tests, although less reliable, have contributed enough information with sufficient frequency to make them a necessary diagnostic procedure. In patients with drug sensitivities, chronic urticaria, and vernal conjunctivitis, skin testing is disappointing.

The diagnosis of allergic diseases is not a function of a laboratory technician who possesses and uses a set of diagnostic allergens. Unfortunately, for the sake of good medical practice and the welfare of the unsuspecting patient, clinical laboratories offering skin testing services to determine allergic sensitivity are still in existence. The services of most of these laboratories are rendered without the supervision of a certified specialist in allergy or a licensed physician who has had adequate special training in allergy. Skin tests, even when performed under the best of conditions, entail risks of severe or fatal reactions. These risks are curtailed to a point of insignificance when the tests are performed under the supervision of a physician who is familiar with the patient's history and physical status. More important still is the need of training and knowledge to wisely interpret the results of the tests.

The establishment of certification of specialists in allergy under the American Board of Internal Medicine indicates the belief of representative national organizations that the diagnosis and treatment of allergic disorders require considerable training and skill. Even though a physician experienced in allergy may not have fully met the requirements of certification, he is able to offer to his patient a standard of service that cannot be approached by any laboratory. A diagnosis of an allergic disease based on the shallow security of a slight, questionable positive reaction to skin test, rather than the thorough appraisal of the patient as an entity, leads to inaccuracy in diagnosis and to ineffectual treatment.

LETTERS to the Editor . . .

THE DEVELOPMENTS of medicine in California during the last quarter century reflect in no small part the growth and vigor of the State Medical Association—a growth of sweeping dimension which called for sound legal guidance and advice during many decades. The fact that such guidance and advice was ably given is evident to all who pause to look. Our thanks go forth to Hartley Peart.

To catalog the work of Mr. Peart on behalf of medicine would take more time and space than is at my disposal. Only those who have prepared for and sat through long Council meetings lasting often from Friday evening to late Sunday night, long Executive Committee meetings called at almost any day and hour, House of Delegates sessions that spanned the clock, court-room sessions on medical problems that saw whole weeks go by, and endless legislative hearings in the State Capitol—only they have any concept of the arduous tasks he and his associates have performed.

The record of our state in medical leadership is his testimonial. May I voice the feelings of myself and many colleagues in placing on record this small tribute to his memory and the part he played so long and ably in the molding of our professional destiny. We are indeed fortunate that his able and modest associates are still at our legal helm. To Mr. Hassard, Mr. Smith and their staff our sympathy and appreciation.

Yours very truly,

L. H. GARLAND, M.D.